



(11)

EP 0 836 145 A2

EUROPEAN PATENT APPLICATION

(43) Date of publication:
15.04.1998 Bulletin 1998/16

(51) Int Cl.⁶: G06F 17/30, H04L 29/06

(21) Application number: 97307740.7

(22) Date of filing: 01.10.1997

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC
NL PT SE
Designated Extension States:
AL LT LV RO SI

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(30) Priority: 11.10.1996 US 729105

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(54) Method for transferring and displaying data pages on a data network

(57) The apparent speed of a connection between a browser at a user station and a proxy or gateway on a network such as the Internet is increased by providing a local proxy at the user station which interacts with a remote proxy. While the remote proxy is retrieving a newly requested World Wide Web page, for example, from the appropriate content provider, it may also be sending to the local proxy a stale cached version of that page. When the new version of the page is finally retrieved, the remote proxy determines the differences between the new version and the stale version, and, as-

suming the differences do not exceed the new page in size, sends the differences to the local proxy which then reconstructs the new page from the differences and the stale version. The local proxy delivers the new page to the browser, which need not even be aware that a local proxy exists; it is aware only that it received the page it requested. Because computational speed and power are frequently higher and cheaper than transmission speed, the apparent speed of the connection between the user station and the network has been increased at modest cost.

FIG. 1

